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ABSTRACT

Effective planning of vocational education programs requires information about both the educational demand of individuals and the manpower demands of business and industry. Two characteristics of the manpower demand in Minnesota which are defined and estimated in this report are occupational demand, the total number of employment positions in a given geographic area, and unfilled positions, the number of positions to be newly filled in a given time period. Occupational demand for a specific occupation may be defined as the number of positions in the occupation last year plus the average annual growth or decline in positions. Thus, unfilled positions in the occupation may be defined as the average annual growth or decline in positions plus the annual number of positions vacated by worker withdrawal. The methods used to estimate occupational demand and unfilled positions are detailed in the report, along with tabular data for the State, for the Minneapolis-St. Paul metropolitan area, and for the 11 economic regions of the State. Limitations of the estimates and assumptions made are pointed out. No implications are drawn as to how demand will be filled by supply; only the total number of positions (occupational demand) and the number of unfilled positions have been estimated. The purpose of this report is to supplement existing information provided by the Minnesota Department of Manpower Services. (MF)





OCCUPATIONAL

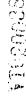
DEMAND

IN

MINNESOTA

FOR

1973





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GEORGE H. COPA AND DONALD E. IRVIN, JR.

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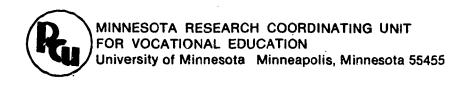




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OCCUPATIONAL DEMAND IN MINNESOTA FOR 1973

Effective planning of vocational education programs requires information about both the educational demand of individuals and the manpower demands of business and industry. Educational demands of individuals refer to the scope and kind of training that is consistent with individual needs and abilities to benefit from vocational education. Manpower demands of business and industry refer to the number and kind of occupational positions needed to be filled in terms of training requirements, and where and when the positions are available.

The purpose of this report is to supplement existing information on the manpower demands of business and industry in Minnesota. As a supplement, the information should be used and interpreted with other pertinent information, which may be more specific to a particular problem, situation, or location.

Two characteristics of the manpower demand in Minnesota are defined and estimated in this report. These characteristics are occupational demand and unfilled positions.

Occupational demand is defined as the total number of employment positions in a given geographic area, such as a state or an economic region. This characteristic describes the scope or size of an occupation in terms of total number of positions. The second characteristic, unfilled positions, is defined as the number of positions which are to be newly filled in a given time period; it is part of occupational demand. Unfilled positions more specifically define the number of new employees needed during a time period.

The Minnesota Department of Manpower Services provides Minnesota with an estimate of occupational demand for 1968 and 1975. These estimates are based on projected industry growth in Minnesota, projected occupational staffing of industries for the Nation, and Census reports on occupational and industrial categorization of the jobs held by the population in Minnesota. Periodically, as new information becomes available (such as the 1970 Census) these estimates of occupational demand will be updated.

A gross estimate of unfilled positions in each of several occupations can be derived by considering two major factors. The first is average growth or decline in occupational demand for a given occupation. Growth is addition of new positions over time, while decline is the elimination of existing positions over time. The second factor is the annual replacement or workers who die, retire, or withdraw from the labor force for other reasons.

Using these factors and a year as the appropriate time period, occupational demand for a specific occupation can be defined as the number of positions in the occupation last year plus the average annual growth or decline in positions. Similarly, unfilled positions in the occupation can be defined as the average annual growth or decline in positions plus the annual number of positions which were vacated because of death, retirement, or worker withdrawal for other reasons.

^{1&}quot;1975 Employment, Minnesota and Minneapolis-St. Paul Metropolitan Area and 11 Economic Regions", Minnesota Department of Manpower Services, St. Paul, Minnesota, January, 1970.



The next section of this report describes how these factors were specifically calculated and combined in the estimation of occupational demand and unfilled positions for 1973. The same methods can be used to generate estimates for other future periods.

METHOD OF ESTIMATION

In this section of the report, the estimates of occupational demand and unfilled positions for 1973 for the nine broadest occupational categories in the state of Minnesota will be used to illustrate how specific calculations were made. Occupational demand for 1973 is the first estimate which will be described. It is derived by using data supplied by the Minnesota Department of Manpower Services. 2 They provide occupational demand estimates for 1968 and 1975 using a linear projection. Average annual growth or decline can be estimated by subtracting the number of positions estimated for 1968 from the number of positions in 1975 and dividing by seven (the number of years between 1968 and 1975). As an example from Table 1, there were 256,469 professional positions projected for 1975 and 213,304 professional positions estimated in 1968. Subtracting 213,304 from 256,469 and dividing by seven gives the estimated average growth of 6,166 positions. The annual growth or decline for professionals shown in Table 1 is 6,148; the discrepancy between 6,166 and 6,148 was caused by rounding errors when annual growth or decline was calculated for each of the professionals. In making this calculation, it is assumed that occupational demand grows or declines by a constant annual rate between 1968 and 1975. This means that only general trends in occupational demand are considered; no attempt has been made to take into account year to year changes in the national, state, or local oconomy which may have a very specific and significant impact on yearly occupational demand.

Estimated occupational demand for 1972 is calculated by multiplying average annual growth or decline by four and adding this product to estimated 1968 occupational demand. Adding one more year of annual growth or decline to the 1972 estimated occupational demand gives 1973 occupational demand. The results of these calculations are shown in Table 2.

The second characteristic to be calculated is unfilled positions. Unfilled positions is the sum of annual growth or decline in demand plus annual number of positions which must be replaced because they were vacated by workers who died, retired, or left the position for some other reason. Annual growth or decline in demand has already been calculated. Annual replacement positions is



^{2&}lt;sub>Ibid</sub>.

The occupation of farmer and farm worker as reported by the Minnesota Department of Manpower services was further sub-divided into three occupations: (a) farmers on farms in economic classification I-IV (defined by the Census of Agriculture, 1969, as those having sales of farm products of \$5000 or more), (b) ot'er farmers (includes those with farm sales of \$4999 or less, part-time and part-retired farm operators, and abnormal farms), and (c) farm workers, using information from the 1959, 1964, and 1969 Census of Agriculture: Minnesota, U.S. Department of Commerce, Bureau of the Census.

Table 1

MINNESOTA ANNUAL GROWTH OR
DECLINE IN OCCUPATIONAL DEMAND

Occupation	1968 Demand	1975 Demand	Annual Growth or Decline
Professional	213,304	256,469	6,148
Managers	125,066	135,596	1,504
Clerical	231,120	271,466	5,758
Sales	111,359	122,202	1,549
Craftsmen	193,052	218,035	3,561
Operatives	228,543	259,004	4,348
Service	180,768	208,162	3,909
Farmers and Farm Workers	132,696	102,226	-4,352
Laborers (exc. Farm & Mine)	50,708	49,228	-211

Table 2
MINNESOTA OCCUPATIONAL DEMAND 1973

Occupation	1972 Demand	Annual Growth or Decline	1973 Demand
Professional	238,899	6,148	245,047
Managers	131,082	1,504	132,586
Clerical	254,152	5,758	259,910
Sales	117,555	1,549	119,104
Craftsmen	207,296	3,561	210,857
Operatives	245,935	4,348	250,283
Service	196,404	3,909	200,313
Farmers and Farm Workers	115,288	-4,352	110,936
Laborers (exc. Farm & Mine	49,864	-211	49,653



derived by multiplying a replacement percentage times the occupational demand in the last time period (1972 for this report). Replacement percentages vary between occupations and by sex of employees. To calculate replacement rates for specific occupations, the number of males and females in the occupation must first be estimated. In this report the percent male and female for occupational categories was derived from the 1960 Census of Population.4 The rate for the next broadest occupational category was used for occupations which did not have a male-female percentage reported. The number and percent of males and females in each of the broad occupational categories for 1972 is shown in Table 3. It was assumed that the male-female percentages by occupation remained constant between 1960 and 1972. The validity of this assumption was checked by comparing the male-female percentages for the nine broadest occupational categories for 1960 and 1970 (this was the finest occupational grouping with a sex distribution available from the 1970 Census of Population for Minnesota at this time). The largest deviation for one of the nine occupational categories between 1960 and 1970 was 11 percentage points for clerical and craftsmen. The average deviation in male-female percentages between 1960 and 1970 for the nine broad occupational groups was 4.1 percentage points.

Table 3

PERCENT AND NUMBER OF MALES AND FEMALES
IN 1972 OCCUPATIONAL DEMAND FOR MINNESOTA

Occupation	1972 Demand	% Male	No. Male	% Female	No. Female
Professional	238,889	59	140,945	41	97,944
Managers	131,082	87	114,041	13	17,041
Clerical	254,152	32	81,329	68	172,823
Sales	117,555	63	74,060	37	43,495
Craftsmen	207,296	97	201,077	3	6,219
Operatives	245,935	77	189,370	23	56,565
Service	196,404	32	62,849	68	133,555
Farmers and Farm Workers	115,288	92	106,065	8	9,223
Laborers (exc. Farm & Mine)	49,864	97	48,368	3	1,496

⁴¹⁹⁶⁰ Census of the Population: General Population Characteristics: Minnesota, U.S. Department of Commerce, Bureau of the Census.

^{5&}quot;1970 Census of Population - Fourth Count - Minnesota", Minnesota Analysis and Planning Systems, St. Paul, Minnesota, March, 1972.



After the number of males and females in each occupation is calculated, the number of replacements for each sex can be calculated by multiplying the number of persons of a given sex in an occupation by the replacement rate for that sex and occupation. For example, from Table 4, there are 140,945 male professionals and the replacement rate for male professionals is 1.6 percent. Multiplying 140,945 by .016 results in an estimated annual number of replacements of 2,255. The results for female professionals and the other broad occupational categories is also shown in Table 4. Total number of replacements for a given occupation is the sum of male and female replacements for that occupation. For professionals, the total estimated replacements needed is 2,255 plus 4,799 or 7,054; the discrepancy between 7,054 and 6,495, the number of professional replacements needed as shown in Table 4, is caused by the use of specific male-female percentages and replacement rates for each individual professional occupation and summing over occupations to get total replacements for professionals.

Table 4

MINNESOTA REPLACEMENT RATES AND NUMBERS
BY SEX AND OCCUPATION, 1973

Occupation	Total Male	Male Replace- ment Rate	Number of Male Re- placements	Total Female		Number of Female Re- placements	
Professional	140,945	1.6	2,255	97,944	4.9	4,799	6,495
Manager	114,041	2.5	2,851	17,041	4.7	801	3,136
Clerical	81,329	1.8	1,464	172,823	4.9	8,468	10,140
Sales	74,060	2.0	1,481	43,495	4.7	2,044	3,525
Craftsmen	201,077	1.9	3,820	6,219	4.3	267	3,836
Operatives	189,370	1.5	2,841	56,565	4.1	2,319	4,857
Service	62,849	2.7	1,697	133,555	4.7	6,277	7,885
Farmers and Farm Workers	106,065	2.6	2,758	9,223	2.6	240	3,045
Laborers (exc. Farm & Mine)	48,368	1.7	822	1,496	4.7	70	892

The replacement rates, except for farmers, used in this report were derived by the U.S. Department of Labor.6 The rates are based on labor force participation

^{6&}quot;Tomorrow's Manpower Needs", U.S. Department of Labor, Bureau of Labor Statistics, Volume 1, Bulletin No. 1606, February, 1969. The replacement rates for farmers was derived from information presented in the 1969 Census of Agriculture: Minnesota, U.S. Department of Commerce, Bureau of the Census, 1971.



rate and age distribution of employees in each of several occupations. Replacements include employment positions vacated for reasons of death, retirement or some other reason.

Unfilled positions is calculated by adding annual growth and decline (Table 1) and annual replacements (Table 4). In making this calculation, two assumptions are made. First, it is assumed that all persons who die, retire, or leave the labor force for other reasons leave a position which will again be filled. Second, it is assumed that when annual growth or decline is negative (the number in the occupation is decreasing), the employees losing their jobs will have first priority on unfilled, replacement positions. This latter assumption may not be realistic for some occupations. For example, persons in the occupation of farmer are self employed and when they go out of business, for reasons other than specified under annual replacement, they do not usually buy another farm. With these assumptions enforced, unfilled positions for each of the nine broadest occupational categories are shown in Table 5.

Table 5
MINNESOTA UNFILLED POSITIONS IN 1973

Occupation	Annual Growth or Decline	Annual Re- placements	Unfilled Positions
Professional	6,148	6,495	12,643
Manager	1,504	3,136	4,640
Clerical	5,758	10,140	15,898
Sales	i,549	3,525	5,074
Craftsmen	3,561	3,836	7,397
Operatives	4,348	4,857	9,205
Service	3,909	7,885	11,794
Farmers and Farm Workers	-4,352	3,045	-1,307
Laborers (exc. Farm & Mine)	-211	892	681



INTERPRETATION OF ESTIMATES

The format for the tables which are shown in the next section of this report are the same as in Table 6. Occupational demand represents an estimate of the total number of employment positions in a given geographic area (stated in the table heading) for the specified occupation in 1973. The second and third columns, respectively, contain estimates of annual growth or decline in positions and annual number of positions to be replaced because employees vacated the positions by death, retirement or other reasons. The fourth column contains an estimate of unfilled positions in 1973 for the given geographic area and specified occupation. It is a sum of annual growth or decline and annual replacements (columns 2 and 3). The last column contains the percent of total unfilled positions represented by the unfilled positions in the specified occupation. For example, in Minnesota for 1973 there is a total estimated unfilled positions of 66,025 which is calculated by summing across all the occupational groups in Table 6. Of this total, 12,643 are unfilled professional positions; therefore. professional unfilled positions represent 12,643 divided by 66,025 multiplied by 100 or 19.4 percent of the State's total unfilled positions. This percentage indicates the relative number of unfilled positions in a particular occupation compared to total unfilled positions.

Table 6

MINNESOTA OCCUPATIONAL DEMAND
AND UNFILLED POSITIONS FOR 1973

Occupation	1973 Demand	Estimated Annual Growth or Decline	Estimated Annual Replacement	1973 Estimated Unfilled Positions	% cf Total Unfilled Positions
Professional	245,047	6,148	6,495	12,643	19.2
Managers	132,586	1,504	3,136	4,640	7.0
Clerical	259,910	5,758	10,140	15,898	24.1
Sales	119,104	1,549	3,525	5,074	7.7
Craftsmen	210,857	3,561	3,836	7,397	11.2
Operatives	250,283	4,348	4,857	9,205	13.9
Service	200,313	3,909	7,885	11,794	17.9
Farmers and Farm Workers	110,936	-4,352	3,045	-1,307	-2.c
Laborers (exc. Farm & Mine)	49,653	~211	892	681	1.0
TOTAL				66,025	100.0

The next section of this report presents occupational demand and unfilled positions for 1973 in (a) Minnesota, (b) Minneapolis-St. Paul metropolitan area, (c) outstate Minnesota, excluding the Minneapolis-St. Paul metropolitan area, and (d) the 11 economic regions. For the first three geographic areas, the information is presented for 151 unique occupations. For the 11 economic regions, only 44 occupations are used because of the reduction in total number of employees for regions as compared to the State. A map showing the 11 economic regions is provided in the Appendix.

The reader is cautioned in interpreting the information reported on occupational demand and unfilled positions. Interpretation should be tempered by noting that the numbers are estimates based on several assumptions and limitations. Assumptions have already been pointed out where they were appropriate. An additional assumption is that in calculating number of replacements for a given occupation in an economic region, the percent males and females in the occupation and the replacement rate for males and females are assumed to be the same as for the total state for that occupation. The limitations of the estimates are that only the major factors affecting occupational demand and unfilled positions, namely growth and decline and replacements, are considered. The impact of factors such as yearly changes in economic conditions and geographic mobility of employers have not been used in making the estimates. The validity of the assumptions and the impact of the limitations become more critical as the geographic region and the number of persons in a given occupation become smaller.

No attempt has been made to estimate the amount of error in the estimates. It is reasonable to conclude that the percent error is smaller for the larger numeric estimate than for the very small estimate. The relative size of estimates between occupations may be more accurate than the absolute estimate for a given occupation. As stated in the introduction to this report, information presented in the following tables should be used to supplement existing information.

Lastly, the information is an estimate of demand. It makes no implications of how demand will be filled by supply. Only the number total of positions (occupational demand) and the number of unfilled positions has been estimated. These latter positions could be filled by persons currently available for employment or employed as well as persons who in the past have been unavailable for employment (students, homemakers, ex-military service persons, etc.)



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ANNUAL OCCUPATIONAL DEMAND FOR 1973

OCCUPATION	1973 DEMAND	ANNUAL GROWTH OR DECLINE	ANNUAL REPLACE- MENT	1973 UNFILLED POSITIONS	PERCENT OF TOTAL UNFILLED POSITIONS
TOTAL	1578689	22214	43811	66025	100.00
PROFESSIONAL, TECHNICAL, KINDRED	245047	6148	6495	12643	19.15
ENGINEERS, TECHNICAL	26 7 82	990	335	1325	2.01
ENGINEERS, AERONAUTICAL	420	15	3	18	0.03
ENGINEERS, CHEMICAL	815	23	7	30	0.05
ENGINEERS, CIVIL	3929	107	7 2	179	0.27
. "GINEERS, ELECTRICAL	5952	2 2 8	59	287	0.43
E.GINEERS, INDUSTRIAL	4279	193	46	239	0.36
ENGINEERS, MECHANICAL	5233	182	70	252	0.38
ENGINEERS, NETALLURGICAL	329	11	4	15	0.02
ENGINEERS, MINING	382	9	5	14	0.02
ENGINEERS, OTHER	5443	2 22	69	291	0-44
NATURAL SCIENTISTS	4315	140	54	194	0.29
CHEMISTS	2671	80	37	117	0.18
AGRICULTURAL SCIENTISTS	247	6	3	9	0.01
BIOLOGICAL SCIENTISTS	414	14	7	21	0.03
GEOLOGISTS.GEOPHYSICISTS	92	3	Ö	3	000
MATHEMATICIANS	395	17	3	20	0.03
PHYSICISTS	397	19	3	22	0.03
OTHER NATURAL SCIENTISTS	99	1	1	2	C-CO
TECHNICIANS, EXC. MED. & DENTAL	22796	875	287	1162	
DRAFTSMEN	7034	215	62	1162	1.76
SURVEYORS	1576	54	18	277	0.42
RADIO OPERATORS	694	14	7	72 21	0-11
TECHNICIANS, OTHER	13492	592	200	21 792	0.03
			200	192	1.20
MEDICAL, OTHER HEALTH WORKERS	44859	1036	1702	2738	4.15
DENTISTS	2345	19	59	78	0.12
DIETICIANS, NUTRIONISTS	561	3	25	28	0.04
NURSES, PROFESSIONAL	19755	440	880	1320	2.00
OSTEOPATHS	341	- L	8	7	0.01
PHARMAC ISTS	57	0	1	1	0.00
PHYSICIANS & SURGEONS	1877	-10	56	46	0.07
PSYCHOLOGISTS	6853	139	1,77	316	0.48
TECHNICIANS, MEDICAL & DENTAL	573	22	9	31 .	0.05
VETERINARIANS	8635	417	336	753	1.14
OTHER HEALTH WORKERS	641	5	12	17	0.03
	3221	2	139	141	0.21
TEACHERS	57264	658	1951	2609	3.95
ELEMENTARY	25217	-122	1103	981	1.49
SECONDARY	20158	444	525	969	1.47
COLLEGE	7926	263	189	452	0.68
OTHER	3963	73	134	207	0.31
SOCIAL SCIENTISTS	1061	56	21	47	0.07

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ANNUAL OCCUPATIONAL DEMAND FCR 1973

	197 DEMÆ			1973 UNFILLED POSITIONS	
OCCUPATION		UECLINE			POSITIONS
ECONOMISTS	457	12	7	19	0.03
STATISTICIANS & ACTUARIES			12	24	0.04
OTHER	67		2	4	0.01
OTHER PROF., TECH., & KINDRED		2423	2145	4568	6.92
ACCOUNTANT & AUDITORS		406	352	758	1.15
AIRPLANE PILOTS & NAVIGATORS	1341	53	16	69	0.10
WKRS. IN ARTS & ENTERTAINMENT	958 14451	19 298	23 443	42 741	0.06
CLERGYMEN		30	169	199	1-12 0-30
DESIGNERS, EXC. DESIGN DRAFTS		45	28	73	0.11
EDITORS & REPORTERS		-116	88	-28	-0-04
LAWYERS & JUDGES		69	151	220	0.33
LIBRARIANS	3032	44	144	188	0.28
PERSONNEL & LABOR RELATED WKRS	3220	105	67	172	0.26
PHOTOGRAPHERS		10	21	31	0.05
SOCIAL & WELFARE WORKERS		147	125	272	0-41
PROF., TECH., KIND., NEC	27943	1313	518	1831	2.77
MANAGERS, OFFICIALS, PROFRIETORS	132536	1504	3136	4640	7.03
CONDUCTORS, R.R	773	-2	29	27	0.04
CREDITMEN	1799	54	41	95	0.14
OFFICERS, PILOTS, ENG. SHIP	187	2	3	5	0.01
PURCHASING AGENTS		89	63	157	0.24
POSTMASTERS & ASSISTANTS		-16 .	34	18	0.03
OTHER MANAGERS, OFF., PROP. NEC		1377	2961	4338	6.57
CLERICAL & KINDRED	259910	5758	10140	15898	24.08
STENOS, TYPISTS, SECRETARIES		1755	3150	4905	7.43
OFFICE MACHINE OPERATORS			455	865	1.31
OTHER CLERICAL & KINDRED		3593	6535	10128	15.34
ACCOUNTING CLERKS		16	84	100	0.15
BOOKKEEPERS, HAND		313	1030	1343	2.03
BANK TELLERS		165 547	154	319	0.48
MAIL CARRIERS		93	606 99	1153 192	1.75 0.29
POSTAL CLERKS		96	126	222	0.34
SHIPPING, RECEIVING CLERKS		41	94	135	0.20
TELEPHONE OPERATORS		111	371	482	0.73
CLERICAL & KINDRED WORKERS NEC		2211	3971	6182	9.36
SALES WORKERS	119104	1549	3525	5074	7.68

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ANNUAL OCCUPATIONAL DEMAND FCR 1973

OCCUPATION	1973 DEMAND	ANNUAL GROWTH CR DECLIN	ANNUAL REPLACE- MENT	1973 UNFILLED POSITIONS	PERCENT OF TOTAL UNFILLED POSITIONS
CRAFT SMEN	210857	3561	38 3 6	7397	11.20
CONSTRUCTION CRAFTS	50176	380	974	1354	2.05
CARPENTERS		-18	376	358	0.54
BRICKMASONS & TILE SETTERS		29	54	83	0.13
CEMENT. CONCRETE FINISHERS		24	14	38	0.06
ELECTRICIANS	7028	91	110	201	0.30
EXCAVATING, GRADING MACH. OP	5268	88	67	155	0.23
PAINTERS & PAPER HANGERS		-16	171	155	0.23
PLASTERERS		6	18	24	0.04
PLUMBERS & PIPEFITTERS		134	128	262	0.40
ROOFERS & SLATERS			16	28	0.04
STRUCTURAL METAL WORKERS	1051	30	20	50	0.08
FOREMEN, NEC	29768	782	583	1365	2.07
METAL WORKING CRAFTS	24840	31 1	465	776	1.18
MACHINISTS & RELATED		97	250	347	0.53
BLACKSMITHS, FORGEMEN, HAMMER		-21	19	- 2	-0.00
BOILERMAKERS		1	5	6	0.01
HEAT TREATERS, ANNEALERS	230	2	4	6	0.01
MILLWRIGHTS	. 1519	33	28	61	0.09
MOLDERS, METAL EXC., COREMAKERS	. 1016	13	16	29	0.04
PATTERNMAKERS, METAL & WCOD	756		15	31	0.05
ROLLERS & ROLL HANDS	. 138		2	4	0.01
SHEET METAL WORKERS			56	129	0.20
TOOL MAKERS & DIEMAKERS	4026	95	70	165	0.25
PRINTING TRADE CRAFTS	7805	59	143	202	0.31
COMPOSITORS TYPESETTERS		-46	80	34	C.05
ELECTROTYPERS, STEREOTYPERS	. 136	-6	2	4	-C.O1
ENGRAVERS EXC. PHOTOENGRAVER	252	6	6	12	0.02
PHOTOENGRAVER, LITHOGRAPHERS	1340	60	20	80	0-12
PRESSMEN & PLATE PRINTERS	2340	45	35	80	C-12
TRANSPORTATION & OTHER PUB.UTL	7958	72	123	195	0.30
LINEMEN & SERVICEMEN			57	175	0.27
LOCOMOTIVE ENGINEERS			63	62	0.09
LOCOMOTIVE FIREMAN			. 3	-42	-0.C6
MECHANICS & REPAIRMEN			1048	2543	3.85
AIRPLANE			28	87	0.13
MOTOR VEHICLE			241	480	0.73
OFFICE MACHINE			11	53	0.08
RADIO & TV MECHANICS			20	25	0.04
RAILROAD & CARSHOP			19	18	0.03
OTHER MECHANICS			729	1880	2.85
OTHER CRAFTSMEN & KINDRED	• 27473	462	500	962	1.46



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ANNUAL OCCUPATIONAL DEMAND FCR 1973

	1973 OEMANO	ANNUAL GROWTH OR		1973 UNFILLED POSITIONS	PERCENT OF TOTAL UNFILLED
OCCUPATION		DECLINE			POSITIONS.
BAKERS	2205	-14	60	46	0.07
CABINETMAKERS		32	47	79	0-12
CRANE DERRICK, HOISTMEN	2138	53	35	88	0.13
GLAZIERS		17	6	23	0.03
JEWELERS & WATCHMAKERS			19	17	0.03
OPTICIANS, LENS GRINDERS		2	10	12	0.02
INSPECTORS, LOG & LUMBER		4 37	4	8	0.01
INSPECTORS, OTHER		14	48 24	85 38	0.13
CRAFTSMEN & KINDRED, NEC			247		0.06 0.86
CRAFISMEN & RINDRED, NEC	10039	319	241	566	0.00
OPERATIVES	250283	4348	4857	9205	13.94
SELECTED TRANS. & UTILITY OPER	60131	979	855	1834	2.78
DRIVERS, BUS, TRUCK, TRACTOR	43820	715	527	1242	1.88
OELIVERYMEN & ROUTEMEN	13104	2 6 5	272	537	0-81
BRAKEMEN & SWITCHMEN, R.R	2597	-1	46	45	0.07
POWER STATION OPERATORS			7	7	0.01
SAILORS & DECKHANDS	215	0	3	3	0.00
SEMISKILLEO METAL WORKERS	36847	997	718	1715	2.60
FURNACEMEN, SMELTER, POWERS		6	7	13	0.02
HEATERS, METAL		2	2	4	C.01
WELDERS, & FLAMECUTTERS		413	151	564	0.85
ASSEMBLERS		576	558	1134	1.72
					2
SEMISKILLED TEXTILE WORKERS	4009	56	164	220	0.33
KNITTERS, LOOPERS, TOPPERS		1	3	4	0.01
SPINNERS		. 0	0	0	0.0
WEAVERS			4	3	0.00
SEWERS & STITCHERS, MFG	3770	56	157	213	0.32
OTHER OPERATIVES	149296	2316	3120	5436	8.23
ASBESTOS, INSULATION WORKERS		8	5	13	C • 02
ATTENOANTS, AUTO SERVICE	10920	211	114	325	0.49
BLASTERERS & POWOERMEN		1	1	2	0.00
LAUNORY & ORY CLEANING OP		22	262	284	0.43
MEAT CUTTERS EXC. MEAT PKG			70	85	0.13
MINE OPERATIVES & LABORERS			57	49	0-C7
OTHER OPERATIVES, NEC	123515	2067	2611	4678	7.09
SERVICE WORKERS	200313	3909	7885	11794	17.86
PRIVATE HOUSEHOLD WKRS	24757	-392	1418	1026	1.55
PROTECTIVE SERVICE WORKERS	12347	340	300	640	0.97
FIREMEN	2627		68	155	
GUARDS, WATCHMEN			145	178	
POLICEMEN, OTHER LAW ENF		220	87	307	0.46
WAITERS, COOKS, BARTENDERS	61377	1282	2360	3642	5.52

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ANNUAL OCCUPATIONAL DEMAND FCR 1973

OCCUPATION	DEMAND	ANNUAL GROWTH OR DECLINE	REPLACE-	1973 UNFILLEC POSITIONS	
BARTENDERS	6456	. 111	164	275	0.42
COOKS EXC. PRIVATE HOUSE OF DS				1245	_
COUNTER & FOUNT?					
WAITERS & WAIT				1812	
OTHER SERVICE WORKERS	101832	2679	380 7	6486	9.82
ATTENDANTS, HOSP. & OTHER INST			885		-
CHARWOMEN & CLEANERS			294		0.72
JANITORS & SEXTONS	21022				
NURSES, PRACTICAL	7696	313	411	724	
SERVICE WORKERS, NEC	43674	904	1355	2259	3.42
FARMERS & FARM WORKERS	110936	-4352	3045	-1307	-1.98
FARMERS IN ECON. CLASSES I-IV	75436	-905	1679	774	1.17
OTHER FARMERS	26292	-3094	1204	-1890	-2.86
FARM WORKERS	9208	-353	162	-191	~0.29
LABORERS EXC. FARM & MINE	49653	-211	892	681	1.03

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ANNUAL OCCUPATIONAL DEMAND FOR 1973

OCCUPATION	1973 DEMAND	ANNUAL GROWTH OR DECLINE	ANNUAL REPLACE- MENT	1973 UNFILLED POSITIONS	PERCENT OF TOTAL UNFILLED POSITIONS
TOTAL	846157	18069	23476	41545	100.CO
PROFESSIONAL, TECHNICAL, KINDRED	151622	4784	3716	8500	20.46
ENGINEERS, TECHNICAL	21839	800	268	1068	2.57
ENGINEERS, AERONAUTICAL	324	8	2	10	0.02
ENGINEERS, CHEMICAL	746	20	6	26	0.06
ENGINEERS, CIVIL	2617	7 2	48	120	0.29
ENGINEERS, ELECTRICAL	5160	194	51	245	0.59
ENGINEERS, INDUSTRIAL	3468	153	37	190	0.46
ENGINEERS, MECHANICAL	4366	148	59	207	0.50
ENGINEERS, METALLURGICAL	242	9	3	12	0.03
ENGINEERS, MINING	44	0	0	0	0.0
ENGINEERS,OTHER		196	62	258	0.62
NATURAL SCIENTISTS	3459	117	42	159	0.38
CHEMISTS	2128	65	29	94	0.23
AGRICULTURAL SCIENTISTS	115	3	1	4	0.01
BIOLOGICAL SCIENTISTS	308	11	5	16	0.04
GEOLOGISTS, GEOPHYSICISTS	92	3	0	3	0.01
MATHEMATICIANS	388	17	3	20	0.05
PHYSICISTS	352	17	3	20	0.05
OTHER NATURAL SCIENTISTS	76	1	1	2	0.00
TECHNICIANS, EXC. MED. & DENTAL	16695	647	208	855	2.06
DRAFTSMEN	5863	181	52	233	0.56
SURVEYORS	620	23	7	30	0.07
RADIO OPERATORS	484	6	Š	11	0.03
TECHNICIANS, OTHER	9728	437	144	581	1.40
MEDICAL, OTHER HEALTH WORKERS	26438	828	1001	1829	4.40
DENTISTS	1325	22	33	55	0.13
DIETICIANS, NUTRIONISTS	389	5	17	22	0.15
NURSES, PROFESSIONAL	11747	353	519	872	2.10
OPTOMETRISTS	122	0	3	3	0.01
OSTEOPATHS	15	Ō	Ō	ő	0.0
PHARMACISTS	1017	-1	30	29	0.07
PHYSICIANS & SURGEONS	3919	110	100	210	0.51
PSYCHOLOGISTS	481	21	8	29	0.07
TECHNICIANS, MEDICAL & DENTAL	5502	301	212	513	1.23
VETERINARIANS	120	1	2	3	0.01
OTHER HEALTH WORKERS	1801	16	77	93	0.22
TEACHERS	25400	453	841	1294	3.11
ELEMENTARY	10301	1	448	449	1.08
SECONDARY	7819	207	202	409	0.98
COLLEGE	5321	199	126	325	0.78
OTHER	1959	46	65	111	0.27
SOCIAL SCIENTISTS	978	25	19	44	0.11

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ANNUAL OCCUPATIONAL DEMAND FOR 1973

	1973 DEMAND	ANNUAL GROWTH OR		1973 UNFILLED POSITIONS	
OCCUPATION		DECLINE			POSITIONS
ECONOMISTSSTATISTICIANS & ACTUARIESOTHER	497	12	7 11 1	19 23 2	0.05 0.06 0.00
OTHER PROF., TECH., & KINDRED ACCOUNTANT & AUDITORS AIRPLANE PILOTS & NAVIGATORS ARCHITECTS WKRS. IN ARTS & ENTERTAINMENT	12565 1265 770 7861	1914 346 55 18 193	1337 277 15 18 240	3251 623 70 36 433	7.83 1.50 0.17 0.09 1.04
CLERGYMEN	1242 1544 3431 1675	20 40 15 59 33 82	54 23 46 99 79 50	74 63 61 158 112 132	0.18 0.15 0.15 0.38 0.27 0.32
PHOTOGRAPHERSSOCIAL & WELFARE WORKERSPROF., TECH., KIND., NEC	729 2407 18818	9 90 954	13 76 347	22 166 1301	0.05 0.40 3.13
MANAGERS, OFFICIALS, PROPRIETORS	70133	1084	1641	2725	6.56
CONDUCTORS, R.R	264	0	10	10	0.02
CREDITMEN	1460	52	33	85	0.20
OFFICERS, PILOTS, ENG. SHIP		0	0	0	0.0
PURCHASING AGENTS		64	47	111	0.27
POSTMASTERS & ASSISTANTS	56	-1	2	1	0.00
OTHER MANAGERS, OFF., PROP. NEC	65895	969	1549	2518	6.06
CLERICAL & KINDRED	177821	4270	6942	11212	26.99
STENOS. TYPISTS. SECRETARIES	47005	1324	2254	3578	8.61
OFFICE MACHINE OPERATORS	10333	391	399	790	1.90
OTHER CLERICAL & KINDREDACCOUNTING CLERKSBOOKKEEPERS, HANDBANK TELLERS	1408 13464 2157 9848	2555 12 232 104 374	4289 61 543 76 390	6844 73 775 180 764	16.47 0.18 1.87 0.43 1.84
MAIL CARRIERS		30 39	50 81	80 120	0.19 0.29
SHIPPING, RECEIVING CLERKS TELEPHONE DPERATORSCLERICAL & KINDRED WORKERS NEC	4380 4367	36 73 1655	73 207 2808	109 280 4463	0.26 0.67 10.74
SALES WORKERS	70829	1189	2088	3277	7.89

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OCCUPATION	1973 DEMAND	ANNUAL GROWTH OR DECLINE	ANNUAL REPLACE- MENT	1973 UNFILLED POSITIONS	PERCENT OF TOTAL UNFILLED POSITIONS
CRAFTSMEN	. 116865	2156	2112	4268	10.27
CONSTRUCTION CRAFTS	23951	224	467	691	1.66
CARPENTERS		7	154	161	0.39
BRICKMASONS & TILE SETTERS		20	29	49	0.12
CEMENT, CONCRETE FINISHERS		18	9	27	0.06
ELECTRICIANS		50	55	105	0.25
EXCAVATING, GRADING HACH. OP		26	16	42	0.10
PAINTERS & PAPER HANGERS		3	102	105	0.25
PLASTERERS		6	10	16	0.04
PLUMBERS & PIPEFITTERS		81	70	151	0.36
ROOFERS & SLATERS		9	9	18	0.04
SINUCIURAL METAL MUNNERS	668	4	13	17	0.04
FOREMEN, NEC	17543	481	343	824	1.98
METAL WORKING CRAFTS	18353	228	340	568	1.37
MACHINISTS & RELATED	9733	67	195	262	0.63
BLACKSMITHS, FORGEMEN, HAMMER		-4	5	1	0.00
BOILERMAKERS		0	3	3	0.01
HEAT TREATERS, ANNEALERS		1	3	4	0.01
MILLWRIGHTS		17	13	30	0.07
MOLDERS, METAL EXC., COREMAKERS		12	12	24	0.06
PATTERNMAKERS, METAL & WOOD		11	11	22	0.05
ROLLERS & ROLL HANDS		1	1	2	0.00
SHEET METAL WORKERS		46	37	83	0.20
TOOL MAKERS & DIEMAKERS	3429	77	60	137	0.33
PRINTING TRADE CRAFTS	5497	48	99	147	0.35
COMPOSITORS TYPESETTERS		~32	48	16	0.04
ELECTROTYPERS, STEREOTYPERS		~5	2	-3	-0.01
ENGRAVERS EXC. PHOTOENGRAVER		4	4 .	8	0.02
PHOTOENGRAVER, LITHOGRAPHERS		51	18	69	0.17
PRESSMEN & PLATE PRINTERS	1782	30	. 27	57	0.14
TRANSPORTATION & OTHER PUB.UTL	3769	36	55	91	0.22
LINEMEN & SERVICEMEN		57	27	84	0.20
LOCOMOTIVE ENGINEERS		1	27	28	0.07
LOCOMOTIVE FIREMAN	106	-22	1	-21	-0.05
MECHANICS & REPAIRMEN	32078	837	530	1367	3.29
AIRPLANE	2411	48	23	71	0.17
MOTOR VEHICLE		118	103	221	0.53
OFFICE MACHINE		32	8	40	0.10
RADIO & TV MECHANICS		9	10	19	0.05
RAILROAD & CARSHOP		0	10	10	0.02
OTHER MECHANICS	19056	630	376	1006	2.42
OTHER CRAFTSMEN & KINDRED	15674	302	278	580	1.40



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ANNUAL OCCUPATIONAL OEMAND FOR 1973

OCCUPATION	1973 DEMAND	ANNUAL GROWTH OR DECLINE	ANMUAL REPLACE- MENT	1973 UNFILLED POSITIONS	PERCENT OF TOTAL UNFILLED OSTITONS
BAKERS	1090	-8	29	21	0.05
CABINETNAKERS	913	11	23	34	0.08
CRANE DERRICK, HOISTMEN	. 1030	28	17	45	0.11
GLAZIERS	290	12	3	15	0.04
JEWELERS & WATCHMAKERS	306	0	설	8	0.02
OPTICIANS. LENS GRINDERS	. 322	-1	6	5	0.01
INSPECTORS, LOG & LUMBER	. 74	1	1	2	0.00
INSPECTORS, OTHER		23	28	51	0.12
UPHOLSTERERS		8	16	24	0.06
CRAFTSMEN & KINDRED, NEC		228	147	375	0.90
OPERATIVES	E31660	2420	2624	5044	12.14
SELECTED TRANS. & UTILITY OPER	26852	466	390	856	2.06
DRIVERS, BUS, TRUCK, TRACTOR		325	220	545	1.31
DELIVERYMEN & ROUTEMEN		136	139	275	0.66
BRAKEMEN & SWITCHMEN, R.R			29	34	0.08
POWER STATION OPERATORS			ź	Ž	0.00
SAILORS & DECKHANDS			ō	ō	0.0
Distance of Beautiful Barbara and Control of the Co		•	·	•	
SEMISKILLED METAL WORKERS	23669	572	484	1056	2.54
FURNACEMEN, SMELTER, POWERS			3	6	0.01
HEATERS, METAL			Õ	Õ	0.0
WELDERS, & FLAMECUTTERS			74	278	
ASSEMBLERS		365	407	772	1.86
NOOCHOLENGS SS S	- 1/510	303	101	,,,	2.00
SEMISKILLED TEXTILE WORKERS	1570	19	63	82	0.20
KNITTERS, LOOPERS, TOPPERS		0	1	1	0.00
SPINNERS		_	ō	Ō	0.0
WEAVERS			Ö	0	0.0
SEWERS & STITCHERS, MFG			62	81	0.19
OTHER OPERATIVES	79569	1363	1687	3050	7.34
ASBESTOS, INSULATION WORKERS		6	3	9	0.02
ATTENDANTS, AUTO SERVICE		119	48	167	0.40
BLASTERERS & POWDERMEN		0	0	0	0.0
LAUNDRY & DRY CLEANING OP	. 3621	29	139	168	0.40
MEAT CUTTERS EXC. MEAT PKG	1609	7	32	39	0.09
MINE OPERATIVES & LABORERS		0	1	1	0.00
OTHER OPERATIVES, NEC	69315	1202	1464	2666	6.42
SERVICE WORKERS	99030	2442	3815	6257	15.06
PRIVATE HOUSEHOLD WKRS		-109	562	453	1.09
PROTECTIVE SERVICE WORKERS		159	153	312	0.75
FIREMEN		43	37	80	0.19
GUARDS, WATCHMEN		32	80	112	0.27
OLICEMEN, OTHER LAW ENF	2626	84	36	120	0.29
HAITERS, COOKS, BARTENDERS	. 29580	778	1137	1915	4-61



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ANNUAL OCCUPATIONAL DEMAND FOR 1973

OCCUPATION	1973 DEMANU	ANNUAL GROWTH OR DECLINE	ANNUAL REPLACE- MENT	1973 UNFILLED POSITIONS	PERCENT OF TOTAL UNFILLED POSITIONS
BARTENDERS	2630	99	66	125	0.30
COOKS EXC. PRIVATE HOUSEHOLDS		236	352	588	1.42
COUNTER & FOUNTAIN WORKERS	2880	116	113	229	0.55
WAITERS & WAITRESSES	15054	367	606	973	2.34
OTHER SERVICE WORKERS	53625	1614	1963	3577	8.61
ATTENDANTS, HOSP. & OTHER INST	10445	512	404	916	2.20
CHARWOMEN & CLEANERS	2839	82	124	206	0.50
JANITORS & SEXTONS	10958	208	448	656	1.58
NURSES, PRACTICAL		178	192	370	0.89
SERVICE WORKERS, NEC		634	795	1429	3.44
FARMERS & FARM WORKERS	3376	-208	93	-115	-0.28
LABORERS EXC. FARM & MINE	24821	-68	445	377	0.91

OUTSTATE A EXCLUDING MPL ST. PAUL AREA

OCCUPATION	1973 DEMAND	ANNUAL GROWTH OR DECLINE	ANNUAL REPLACE- MENT	1973 UNFILLED POSITIONS	PERCENT OF TOTAL UNFILLED POSITIONS
TOTAL	732302	4099	20255	24354	100.00
PROFESSIONAL, TECHNICAL, KINDRED	93355	1350	2755	4105	16.86
ENGINEERS, TECHNICAL	4923	186	62	248	1.02
ENGINEERS, AERONAUTICAL		6	O	6	0.02
ENGINEERS, CHEMICAL		3	0	3	0.01
ENGINEERS, CIVIL		34	24	. 58	0.24
ENGINEERS, ELECTRICAL		33	7	40	0.16
ENGINEERS, INDUSTRIAL		40	8	48	0.20
ENGINEERS, MECHANICAL		34	11	45	0.18
ENGINEERS, METALLURGICAL		2	1	3	0.01
ENGINEERS, MINING		8	4	12	0.05
ENGINEERS, OTHER	571	26	7	33	0.14
NATURAL SCIENTISTS	846	21	10	31	0.13
CHEMISTS	543	15	7	22	0.09
AGRICULTURAL SCIENTISTS		2	2	4	0.02
BIOLOGICAL SCIENTISTS		2	1	3	0.01
GEOLOGISTS, GEOPHYSICISTS		0	Ō	Ō	0.0
MATHEMATICIANS		0	Ō	Ō	0.0
PHYSICISTS		2	Ō	2	0.01
OTHER NATURAL SCIENTISTS	23	0	0	0	0.0
TECHNICIANS, EXC. MED. & DENTAL	6096	227	79	306	1.26
DRAFTSMEN		33	ió	43	0.18
SURVEYORS		31	ii	42	0.17
RADIO OPERATORS		8	2	10	0.04
TECHNICIANS, OTHER		155	56	211	0.87
MEDICAL, OTHER HEALTH WORKERS		209	698	907	3.72
DENTISTS		~2	26	24	0.10
DIETICIANS, NUTRIONISTS		-2	7	5	0.02
NURSES, PROFESSIONAL		87	361	448	1.84
OPTOMETRISTS		-1	5	4	0.02
OSTEOPATHS	· -	0	1	1	0.00
PHARMAC ISTS		-8	26	18	0.07
PHYSICIANS & SURGEONS		29	76	105	0.43
PSYCHOLOGISTS		1	1	2	C.01
TECHNICIANS, MEDICAL & DENTAL		115	123	238	0.98
VETER INAR I ANS		4	10	14	0.06
OTHER HEALTH WORKERS	1420	-14	62	48	0.20
TEACHERS		203	1106	1309	5.37
ELEMENTARY	14911	-124	654	530	2.18
SECONDARY	12339	237	322	559	2.30
COLLEGE		63	62	125	0.51
OTHER	2004	27	68	95	0.39
GCCIAL SCIENTISTS	78	C	0	O	0.0

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OUTSTATE MINNESOTA EXCLUDING MPLS.-ST.PAUL AREA

ANNUAL OCCUPATIONAL DEMAND FCR 1973

OCCUPATION	1973 DEMAND	GROWTH	REPLACE- MENT	1973 UNFILLED POSITIONS	PERCENT OF TOTAL UNFILLED POSITIONS
ECONOMISTS		0	0	0	0 • C
STATISTICIANS & ACTUARIES		0 0	0 0	C O	0.0
OTHER PROF., TECH., & KINDRED	31132	504	800	1304	5 • 35
ACCOUNTANT & AUDITORS		60	74	134	0.55
AIRPLANE PILOTS & NAVIGATORS	. 81	-1	1	0	0.0
ARCHITECTS		0	4	4	0.02
WKRS. IN ARTS & ENTERTAINMENT	6585	104	203	307	1.26
CLERGYMEN		9	115	124	0.51
DESIGNERS, EXC. DESIGN DRAFTS		5	4	9	0.04
EDITORS & REPORTERS		-131	42	-89	-0.37
LAWYERS & JUDGES		9	51	60	0.25
LIBRARIANS		11	64	75	0.31
PERSONNEL & LABOR RELATED WKRS		22	16	38	0.16
PHOTOGRAPHERS		1	7	8	C.03
SOCIAL & WELFARE WORKERS		56	49	105	0.43
PROF., TECH., KIND., NEC	9125	359	170	529	2.17
MANAGERS, OFFICIALS, PROPRIETORS	62448	419	1494	1913	7.85
CONDUCTORS, R.R	509	-2	19	17	0.07
CREDITMEN	339	2	8	10	0.04
OFFICERS, PILOTS, ENG. SHIP	. 166	2	3	5	0.02
PURCHASING AGENTS	. 1043	24	20	44	0-18
POSTMASTERS & ASSISTANTS	788	-14	32	18	C-C7
OTHER MANAGERS, OFF., PROP. NEC	59603	407	1412	1819	7.47
CLERICAL & KINDRED	82079	1486	3192	4678	19.21
STENOS, TYPISTS, SECRETARIES		431	896	1327	5.45
OFFICE MACHINE OPERATORS	• • • • • • • • • • • • • • • • • • • •	19	55	74	C-30
OTHER CLERICAL & KINDRED	62086	1036	2241	3277	13.46
ACCOUNTING CLERKS		3	22	25	0.10
BOOKKEEPERS, HAND		81	487	568	2.33
BANK TELLERS		61	78	139	0.57
CASHIERS		173	215	389	1.59
MAIL CARRIERS		63	49	112	0.46
POSTAL CLERKS		57	44	101	0-41
SHIPPING, RECEIVING CLERKS	_	5	20	25	0-10
TELEPHONE OPERATORS		38	163	201	0.83
CLERICAL & KINDRED WORKERS NEC	32016	555	1163	1718	7.05
SALES WORKERS	48270	359	1436	1795	7.37



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OUTSTATE MINNESOTA EXCLUDING MPLS.-ST.PAUL AREA

ANNUAL OCCUPATIONAL DEMANC FOR 1973

OCCUPATION	1973 DEMAND	ANNUAL GRCWTH CR CECLINE		1973 UNFILLED POSITIONS	PERCENT OF TOTAL UNFILLED POSITIONS
CRAFTSMEN	93907	1388	1701	3089	12.68
CONSTRUCTION CRAFTS	26205	152	502	654	2.69
CARPENTERS		-25	222	197	0.81
BRICKMASONS & TILE SETTERS		8	25	33	C-14
CEMENT, CONCRETE FINISHERS		5	4	9	C.C4
ELECTRICIANS		40	55	95	0.39
EXCAVATING, GRADING MACH. OP		61	50	111	0.46
PAINTERS & PAPER HANGERS		-19	69	50	C.21
PLASTERERS		0	7	7	C.03
PLUMBERS & PIPEFITTERS		53	57	110	C-45
ROOFERS & SLATERS	317	3	6	9	G.04
STRUCTURAL METAL WORKERS	383	26	7	33	0.14
FOREMEN, NEC	12220	300	240	540	2.22
METAL WORKING CRAFTS	6452	76	120	196	0.80
MACHINISTS & RELATED		_	54	83	0.34
BLACKSMITHS, FORGEMEN, HAMMER		-16	14	-2	-C.01
BOILERMAKERS		0	2	2	C.C1
HEAT TREATERS, ANNEALERS			Ō	С	C.C
MILLWRIGHTS			14	30	0.12
MOLDERS, METAL EXC., COREMAKERS			3	3	C.01
PATTERNMAKERS, METAL & WOOD		4	3	7	0.03
ROLLERS & ROLL HANDS		0	1	1	C.CO
SHEET METAL WORKERS		26	19	45	0.18
TOOL MAKERS & DIEMAKERS			10	27	0.11
PRINTING TRADE CRAFTS	2303	10	43	53	0.22
COMPOSITORS TYPESETTERS	1493	-13	32	19	0.08
ELECTROTYPERS, STEREOTYPERS		-1	0	-1	-0.00
ENGRAVERS EXC. PHOTOENGRAVER		1	1	2	C.01
PHOTOENGRAVER, LITHOGRAPHERS	155	9	2	11	0.05
PRESSMEN & PLATE PRINTERS	553	14	8	22	0.09
TRANSPORTATION & OTHER PUB-UTL	4184		65	100	0.41
LINEMEN & SERVICEMEN			29	89	0.37
LOCOMOTIVE ENGINEERS	. 816	- 2	35	33	0.14
LOCOMOTIVE FIREMAN	. 116	-23	1	-22	-0.09
MECHANICS & REPAIRMEN			515	1173	4.82
AIRPLANE			4	14	0.06
MOTOR VEHICLE			138	259	1.06
OFFICE MACHINE			3	13	0.05
RADIO & TV MECHANICS	. 1089		9	6	0.02
RAILROAD & CARSHOP			9	8	0.03
OTHER MECHANICS	. 17744	521	352	873	3.58
OTHER CRAFTSMEN & KINDRED	. 11784	157	216	373	1.53

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OUTSTATE MINNESCTA EXCLUDING MPLS.-ST.PAUL AREA

ANNUAL OCCUPATIONAL DEMAND FOR 1973

OCCUPATION	1973 DEMAND	ANNUAL GRCWTH CR DECLINE	ANNUAL REPLACE- MENT	1973 UNFILLEC POSITIONS	PERCENT OF TOTAL UNFILLED POSITION!
P 14 5 6	1110		3.0	24	C-10
BAKERS			30 34		
CABINETHAKERS		21	24	45	0.18
CRANE DERRICK, HDISTMEN		24	18	42	6.17
GLAZIERS		5	2	7	0.03
JEWELERS & WATCHMAKERS			10	8	0.03
OPTICIANS, LENS GRINDERS			4	8	0.03
INSPECTORS, LOG & LUMBER			2	4	C • C ?
INSPECTORS, DTHER			20	33	0.14
UPHOL STERERS			7	12	0.05
CRAFTSMEN & KINDRED, NEC	6408	91	99	190	0.78
OPERATIVES	118593	1922	2220	4142	17.01
SELECTED TRANS. & UTILITY OPER	. 33274	512	462	974	4.00
DRIVERS, BUS, TRUCK, TRACTOR			306	696	2.86
DELIVERYMEN & ROUTEMEN			133	261	1.07
BRAKEMEN & SWITCHMEN, R.R			16	10	0.04
POWER STATION OPERATORS			5	5	0.02
SAILORS & DECKHANDS			2	2	0.02
SAILURS & UECKHANUS	• 197	U	2	2.	0.01
SEMISKILLED METAL WORKERS	13163	422	231	653	2.68
FURNACEMEN, SMELTER, POWERS	. 302	2	4	['] 6	0.02
HEATERS, METAL	. 74	1	1	2	0.01
WELDERS, & FLAMECUTTERS		209	76	285	1.17
ASSEMBLERS	. 6475		150	360	1.48
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,					
SEMISKILLED TEXTILE WORKERS	. 2434	36	98	134	0.55
KNITTERS, LOOPERS, TOPPERS			1	1	0.00
SPINNERS		-	ō	ō	0.0
WEAVERS			3	2	0.01
SEWERS & STITCHERS, MFG		_	94	131	0.54
SEMENS & STITCHERS, PIG.	• 2202	3.	77	131	0.51
OTHER OPERATIVES	. 69722	952	1429	2381	9.78
ASBESTOS, INSULATION WORKERS			1	3	C.01
ATTENDANTS, AUTO SERVICE			65	156	0.64
BLASTERERS & POWDERMEN			1	2	0.01
LAUNDRY & DRY CLEANING OP			_	116	0.48
MEAT CUTTERS EXC. MEAT PKG			37	45	0.18
MINE OPERATIVES & LABORERS			56	48	0.20
OTHER OPERATIVES, NEC		-	1146	2011	8.26
UTHER UPLANTIALS! MEGA-************************************	• 34200	000	1110	2011	0.00
SERVICE WORKERS	• 101258	1462	4060	5522	22.67
PRIVATE HOUSEHOLD WKRS	. 14894	-283	855	572	2.35
		. 7.	1	222	1 22
PROTECTIVE SERVICE WORKERS			144	322	1.32
FIREMEN			30	73	0.30
GUARDS, WATCHMEN			64	64	0.26
POLICEMEN, OTHER LAW ENF	. 3691	135	50	185	C.76
WAITERS, COOKS, BARTENDERS	. 31792	503	1220	1723	7.07



OUTSTATE MINNESOTA EXCLUDING MPLS.-ST.PAUL AREA
ANNUAL CCCUPATIONAL DEMANC FCR 1973

OCCUPATION	DEMAND	GROWTH	REPLACE- MENT	1973 UNFILLEC POSITIONS	OF TOTAL
BARTENDERS	3826	52	98	150	0.62
COOKS EXC. PRIVATE HOUSEHOLDS				656	2.69
COUNTER & FOUNTAIN WORKERS			47	79	C•32
WAITERS & WAITRESSES		. 216	622	838	3.44
OTHER SERVICE WORKERS	48202	1064	1841	2905	11.93
ATTENDANTS, HOSP. & OTHER INST			481	910	3.74
CHARWOMEN & CLEANERS		96	170	266	1.09
JANITORS & SEXTONS		134	413	547	2.25
NURSES, PRACTICAL		135	218	353	1.45
SERVICE WORKERS, NEC		270	559	829	3.40
FARMERS & FARM WORKERS	107560	-4144	2950	-1194	-4.90
FARMERS IN ECON. CLASSES I-IV	73141	-862	1628	766	3.15
OTHER FARMERS	25492	-2946	1165	-1781	-7.31
FARM WORKERS	8927	-336	157	-179	-0.73
LABORERS EXC. FARM & MINE	24832	-143	447	304	1.25

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ECONOMIC REGION 1 - NORTHWEST

ANNUAL OCCUPATIONAL DEMAND FOR 1973

OCCUPATION	1973 DEMANO	ANNUAL GROWTH OR DECLINE	MENT	1973 UNFILLED POSITIONS	
TOTAL	. 33812	52	908	960	100.00
PROFESSIONAL, TECHNICAL, KINDRED	. 3906	68	79	147	15.31
ENGINEERS TECHNICAL	. 191	9	2	11	1.15
NATURAL SCIENTISTS	. 24	1	0	1	0.10
MEDICAL, OTHER HEALTH WORKERS	. 775	8	6	14	1.46
TEACHERS (ELEM. & SEC.)	. 1244	6	42	48	5.00
SOCIAL SCIENTISTS	. 0	0	Ç	0	0.0
OTHER PROF., TECH., & KINO	. 1672	44	29	73	7.60
ACCOUNTANTS & AUDITORS			1	2	0.21
ARCHITECTS	•	-	ō	ō	0.0
DESIGNERS & DRAFTSMEN			O	1	0.10
LAWYERS & JUDGES		0	1	1	0.10
PERSONNEL & LABOR RELATED WKRS		0	0	0	0.0
OTHER	. 1477	42	27	69	7.19
MANAGERS, OFFICIALS, PROPRIETORS	. 2899	10	79	89	9.27
CLERICAL & KINORED	. 3132	57	119	176	18.33
STENOS, TYPISTS, SECRETARIES	. 577	14	27	41	4.27
OFFICE MACHINE OPERATORS	. 23	0	0	0	0.0
OTHER CLERICAL & KINDRED	. 2532	43	92	135	14.06
BOOKKEEPERS			20	22	2,29
CASHIERS			5	8	0.83
SHIPPING, RECEIVING CLERKS			Ō	0	0.0
TELEPHONE OPERATORS			5	6	0.63
OTHER		37	62	99	10.31
SALES WORKERS	. 1833	8	54	62	6.46
CRAFTSMEN	. 3604	59	61	120	12.50
CARPENTERS	. 551	-6	12	6	0.63
ELECTRICIANS	. 110	1	1	2	0.21
PLUMBERS & PIPEFITTERS	. 83	0	1	1	0.10
FOREMEN NEC	. 485	17	9	26	2.71
MACHINISTS & RELATED	. 73	3	1	4	0.42



FCONOMIC REGION 1 - NORTHWEST

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OCCUPATION	1973 DEMAND	ANNUAL GROWTH OR DECLINE	ANNUAL REPLACE- MENT	1973 UNFILLED POSITIONS	PERCENT OF TOTAL UNFILLED POSITIONS
BLACKSMITH, FORGE., HAMMER	25	0	0	0	0.0
BOILERMAKERS	. 3	0	0	0	0.0
MILLWRIGHTS	. 0	0	0	o	0.0
SHEET METAL WORKERS	. 27	1	. 0	1	0.10
TOOLMAKERS & DIEMAKERS	. 0	0	0	0	0.0
PRINTING TRADES CRAFTS	. 84	6	1	7	0.73
MECHANICS & REPAIRMEN	1192	26	18	44	4.58
OTHER CRAFTSMEN	971	11	18	29	3.02
OPERATIVES	4028	90	73	163	16.98
ASSEMBLERS	127	8	2	10	1.04
WELDERS	165	8	1	9	0.94
SEWERS & STITCHERS, MFG	0	0	O	0	0.0
DRIVERS & DELIVERYMEN	1237	18	17	35	3.65
OTHER OPERATIVES	2499	56	53	109	11.35
SERVICE WORKERS	4667	29	192	221	23.02
PRIVATE HOUSEHOLD	1077	-15	61	46	4.79
PROTECTIVE SERVICE WORKERS	159	5	4	9	0.94
WAITERS, COOKS, BARTNDRS, COUNTER	1319	8	47	55	5.73
OTHER SERVICE WORKERS	2112	31	80	111	11.56
FARMERS & FARM WORKERS	8679	-269	232	-37	-3.85
LABORERS EXC. FARM	1064	0	19	19	1.98

ECONOMIC REGION 2 - NORTH

OCCUPATION	1973 DEMAND	ANNUAL GROWTH OR DECLINE		1973 UNFILLED POSITIONS	PERCENT OF TOTAL UNFILLED POSITIONS
TOTAL	. 18890	-140	493	353	100.00
PROFESSIONAL, TECHNICAL, KINDRED	2336	9	49	58	16.43
ENGINEERS TECHNICAL	. 72	0	0	0	0.0
NATURAL SCIENTISTS	. 39	0	0	0	0.0
MEDICAL, OTHER HEALTH WORKERS	. 272	0	2	2	0.57
TEACHERS (ELEM. & SEC.)	. 775	-3	26	23	6.52
SOCIAL SCIENTISTS	. 4	0	0	0	0.0
OTHER PROF., TECH., & KIND	. 1174	12	21	33	9.35
ACCOUNTANTS & AUDITORS		ō	ī	1	0.28
ARCHITECTS	. 0	0	0	0	0.0
DESIGNERS & DRAFTSMEN		0	0	0	0.0
LAWYERS & JUDGES		0	0	0	0.0
PERSONNEL & LABOR RELATED WKRS		0	. 0	0	0.0
OTHER	1067	12	20	32	9.07
MANAGERS, OFFICIALS, PROPRIETORS	1883	-13	52	39	11.05
CLERICAL & KINDRED	1811	9	70	79	22.38
STENOS, TYPISTS, SECRETARIES	. 384	2	18	20	5.67
OFFICE MACHINE OPERATORS	. 10	0	0	0	0.0
OTHER CLERICAL & KINDRED	1417	7	52	59	16.71
BOOKKEEPERS		ó	10	10	2.83
CASHIERS	182	5	7	12	3.40
SHIPPING, RECEIVING CLERKS		0	0	O	0.0
TELEPHONE OPERATORS		0	3	3	0.85
OTHER	893	2	32	34	9.63
SALES WORKERS	1250	3	37	40	11.33
CRAFTSMEN	2182	-9	35	26	7.37
CARPENTERS	253	-5	5	0	0.0
ELECTRICIANS	. 105	-1	1	0	0.0
PLUMBERS & PIPEFITTERS	. 74	0	1	1	0.28
FOREMEN NEC	. 251	-1	5	4	1.13
CACHINISTS & RELATED	. 11	0	0	0	0.0

- 27 ECONOMIC REGION 2 - NORTH

ANNUAL OCCUPATIONAL DEMAND FOR 1973

OCCUPATION	1973 DEMAND	ANNUAL GROWTH OR DECLINE	ANNUAL REPLACE- MENT	1973 UNFILLED POSITIONS	PERCENT OF TOTAL UNFILLED POSITIONS
BLACKSMITH, FORGE., HAMMER	. 2	0	0	0	0.0
BOILERMAKERS	. e	0	0	0	0.0
MILLWRIGHTS	92	~2	1	-1	-0.28
SHEET METAL WORKERS	. 31	0	0	0	0.0
TOOLMAKERS & DIEMAKERS	. 0	0	Ó ·	0	0.0
PRINTING TRADES CRAFTS	. 47	0	0	0	0.0
MECHANICS & REPAIRMEN	690	4	10	14	3.97
OTHER CRAFTSMEN	626	-4	12	8	2.27
OPERATIVES	2505	-26	47	21	5.95
ASSEMBLERS	. 7	0	0	0	0.0
WELDERS	. 69	~1	. 0	-1	-0.28
SEWERS & STITCHERS, MFG	. 25	0	1	1	0-28
DRIVERS & DELIVERYMEN	870	1	12	13	3.68
OTHER OPERATIVES	1534	-26	34	8	2.27
SERVICE WORKERS	2508	5	100	105	29.75
PRIVATE HOUSEHOLD.	449	-10	25	15	4-25
PROTECTIVE SERVICE WORKERS	. 111	1	3	4	1.13
WAITERS, COOKS, BARTNDRS, COUNTER	847	7	30	37	10.48
OTHER SERVICE WORKERS	1101	7	42	49	13.88
FARMERS & FARM WORKERS	2792	-89	74	-15	-4.25
LABORERS EXC. FARM	1623	-29	29	0	0.0

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OCCUPATION	1973 DEMAND	ANNUAL GROWTH OR DECLINE	ANNUAL REPLACE- MENT	1973 UNFILLED POSITIONS	PERCENT OF TOTAL UNFILLED POSITIONS
TOTAL	104742	456	2751	3207	100.00
PROFESSIONAL, TECHNICAL, KINDRED	14962	172	295	467	14.56
ENGINEERS TECHNICAL	1589	41	20	61	1.90
NATURAL SCIENTISTS	367	11	4	15	0.47
MEDICAL, OTHER HEALTH WORKERS	2855	7	25	32	1.00
TEACHERS (ELEM. & SEC.)	3274	-13	112	99	3.09
SOCIAL SCIENTISTS	58	1	1	2	0.06
OTHER PROF., TECH., & KIND	6819	125	133	258	8.04
ACCOUNTANTS & AUDITORS	878	12	19	31	0.97
ARCHITECTS	32	0	ő	Ċ	0.0
DESIGNERS & DRAFTSMEN	332	5	6	11	0.34
LAWYERS & JUDGES		-1	8	7	0.22
PERSONNEL & LABOR RELATED WKRS		6	3	9	0.28
OTHER	5116	103	97	200	6.24
MANAGERS, OFFICIALS, PROPRIETORS	9493	-20	262	242	7.55
CLERICAL & KINDRED	13938	128	557	685	21.36
STENOS, TYPISTS, SECRETARIES	3166	45	154	199	6.21
OFFICE MACHINE OPERATORS	173	-3	7	4 .	0.12
OTHER CLERICAL & KINDRED	10599	86	396	482	15.03
BOOKKEEPERS	1329	-1	54	53	1.65
CASHIERS		18	35	53	1.65
SHIPPING, RECEIVING CLERKS	188	0	3	3	0.09
TELEPHONE OPERATORS		0	21	21	0.65
OTHER	7745	69	283	352	10.98
SALES WORKERS	6278	-10	188	178	5.55
CRAFTSMEN	18497	152	333	485	15.12
CARPENTERS	986	-8	22	14	0-44
ELECTRICIANS	964	4	15	19	0.59
PLUMBERS & PIPEFITTERS	576	7	10	17	0.53
FOREMEN NEC	3147	55	62	117	3.65
MACHINISTS & RELATED	566	-4	11	7	0-22

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ECONOMIC REGION 3 - NORTHE AST

ANNUAL OCCUPATIONAL DEMAND FOR 1973

OCCUPATION	1973 DEMAND	ANNUAL GROWTH OR DECLINE	ANNUAL REPLACE- MENT	1973 UNFILLED POSITIONS	PERCENT OF TOTAL UNFILLED POSITIONS
BLACKSMITH, FORGE., HAMMER	. 73	-4	2	-2	-0.06
BOILERMAKERS	. 53	0	1	ı	0.03
MILLWRIGHTS	399	4	7	11	0.34
SHEET METAL WORKERS	231	2	3	5	0.16
TOOLMAKERS & DIEMAKERS	. 63	0	1	1	0.03
PRINTING TRADES CRAFTS	329	2	6	8	0.25
MECHANICS & REPAIRMEN	5372	78	84	162	5.05
OTHER CRAFTSMEN	5738	16	109	125	3.90
OPERATIVES	19948	101	393	494	15.40
ASSEMBLERS	. 87	0	2	2	0.06
WELDERS	. 1261	29	15	44	1.37
SEWERS & STITCHERS, MFG	. 437	9	18	27	0.84
DRIVERS & DELIVERYMEN	. 5278	55	74	129	4.02
OTHER OPERATIVES	12885	8	284	292	9.11
SERVICE WORKERS	. 14520	36	576	612	19.08
PRIVATE HOUSEHOLD	2329	-55	134	79	2-46
PROTECTIVE SERVICE WORKERS	. 1497	32	40	72	2.25
WAITERS, COOKS, BARTNORS, COUNTER	. 3427	10	124	134	4-18
OTHER SERVICE WORKERS	7267	49	278	327	10.20
FARMERS & FARM WORKERS	2265	-45	60	15	0.47
LABORERS EXC. FARM	4841	-58	87	29	0.90

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ECONOMIC REGION 4 - WEST

OCCUPATION	1973 DEMAND	ANNUAL GROWTH OR DECLINE		1973 UNFILLED POSITIONS	PERCENT OF TOTAL UNFILLED POSITIONS
TOTAL	70101	326	1928	2254	100.00
PROFESSIONAL, TECHNICAL, KINDRED	-9053	233	191	424	18.81
ENGINEERS TECHNICAL	. 329	13	4	17	0.75
NATURAL SCIENTISTS	. 94	3	1	4	0.18
MEDICAL, OTHER HEALTH WORKERS	1699	39	15	54	2.40
TEACHERS (ELEM. & SEC.)	. 2796	51	93	144	6.39
SOCIAL SCIENTISTS	. 12	0	0	0	0.0
OTHER PROF., TECH., & KIND	4123	127	. 78	205	9.09
ACCOUNTANTS & AUDITORS		8	7	15	0.67
ARCHITECTS		Ŏ	ò	Ō	0.0
DESIGNERS & DRAFTSMEN		3	i	4	0.18
LAWYERS & JUDGES		2	4	6	0.27
PERSONNEL & LABOR RELATED WKRS	. 100	4	2	6	0.27
OTHER	. 3444	110	64	174	7.72
MANAGERS, OFFICIALS, PROPRIETORS	. 6368	32	175	207	9.18
CLERICAL & KINDRED	. 7430	161	292	453	20.10
STENOS, TYPISTS, SECRETARIES	. 1407	39	67	106	4.70
OFFICE MACHINE OPERATORS	451	14	17	31	1.38
OTHER CLERICAL & KINDRED	. 5572	108	208	316	14.02
BOOKKEEPERS		8	43	51	2.26
CASHIERS		11	15	26	1.15
SHIPPING, RECEIVING CLERKS	. 164	$\bar{1}$	2	3	0.13
TELEPHONE OPERATORS	557	10	26	36	1.60
OTHER	3396	78	122	200	8.87
SALES WORKERS	. 4804	25	143	168	7.45
CRAFTSMEN	. 8019	113	142	255	11-31
CARPENTERS	. 1289	-6	29	23	1.02
ELECTRICIANS	. 230	2	3	5	0.22
PLUMBERS & PIPEFITTERS	. 231	3	4	7	0.31
FOREMEN NEC	. 803	21	15	36	1.60
MACHINISTS & RELATED	. 132	2	2	4	0.18



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ANNUAL OCCUPATIONAL DEMAND FOR 1973

OCCUPATION	1973 DEMAND	ANNUAL GROWTH CR DECLINE	ANNUAL REPLACE- MENT	1973 UNFILLED POSITIONS	PERCENT OF TOTAL UNFILLED POSITIONS
BLACKSMITH, FORGE., HAMMER	. 69	-1	2	1	0.04
BOILERMAKERS	. 10	0	0	0	0.0
MILLWRIGHTS	, 7	0	0	0	0.0
SHEET METAL WORKERS	. 86	2	1	3	0.13
TOOLMAKERS & DIEMAKERS	. 8	0	0	0	0.0
PRINTING TRADES CRAFTS	322	1	6	7	0.31
MECHANICS & REPAIRMEN	2924	66	45	111	4.92
OTHER CRAFTSMEN	1908	23	3€	58	2.57
OPERATIVES	7890	118	144	262	11.62
ASSEMBLERS	133	5	3	8	0.35
WELDERS	401	14	4	18	0.80
SEWERS & STITCHERS, MFG	94	1	3	4	0.18
DRIVERS & DELIVERYMEN	3140	49	44	93	4.13
OTHER OPERATIVES	4122	49	90	139	6.17
SERVICE WORKERS	10381	171	425	596	26.44
PRIVATE HOUSEHOLD	2384	0	134	134	5.94
PROTECTIVE SERVICE WORKERS	319	10	8	18	0.80
WAITERS, COOKS, BARTNDRS, COUNTER	2993	41	107	148	6.57
OTHER SERVICE WORKERS	4685	120	176	296	13.13
FARMERS & FARM WORKERS	14120	~529	380	-149	-6.61
LABORERS EXC. FARM	2036	2	36	38	1.69

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ECONOMIC REGION 5 - NORTH CENTRAL

OCCUPATION	1973 DEMAND	ANNUAL GROWTH OR DECLINE	ANNUAL REPLACE- MENT	1973 UNFILLED POSITIONS	PERCENT OF TOTAL UNFILLED POSITIONS
TOTAL	44598	301	1181	1482	100.00
PROFESSIONAL, TECHNICAL, KINDRED	5104	117	109	226	15.25
FMGINEERS TECHNICAL	187	7	2	9	0.61
N== FURAL SCIENTISTS	13	0	0	0	0.0
MEDICAL, OTHER HEALTH WORKERS	975	19	8	27	1.82
TEACHERS (ELEM. & SEC.)	1816	27	61	88	5.94
SOCIAL SCIENTISTS	0	0	0	0	0.0
OTHER PROF., TECH., & KIND	2113	64	38	102	6.88
ACCOUNTANTS & AUDITORS	90	2	i	3	0.20
ARCHITECTS	0	ō	ō	ő	0.20
DESIGNERS & DRAFTSHEN	39	1	Ō	i	0.07
LAWYERS & JUDGES	70	Õ	2	ž	0.13
PERSONNEL & LABOR RELATED WKRS	6	0	0	Ō	0.0
OTHER	1908	61	35	96	6.48
MANAGERS, OFFICIALS, PROPRIETORS	4288	34	117	151	10.19
CLERICAL & KINDRED	4051	83	155	238	16.06
STENOS, TYPISTS, SECRETARIES	687	19	32	51	3.44
OFFICE MACHINE OPERATORS	6	0	0	0	0.0
OTHER CLERICAL & KINDRED	3358	64	123	187	12 42
BOOKKEEPERS	601	6	24	30	12.62 2.02
CASHIERS		6	8	14	0.94
SHIPPING, RECEIVING CLERKS	32	ő	ő	0	0-94
TELEPHONE OPERATORS	159	ĭ	7	8	0.54
OTHER	2342	51	84	135	9.11
SALES WORKERS	2858	30	84	114	7-69
CRAFTSMEN	5636	90	98	188	12-69
CARPENTERS	677	1	15	16	1.08
FLECTRICIANS	168	2	2	4	0.27
PLUMBERS & PIPEFITTERS	164	3	2	5	0.34
FOREMEN NEC	801	21	15	36	2.43
MACHINISTS & RELATED	165	1	3	4	0.27

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ANNUAL OCCUPATIONAL DEMAND FOR 1973

OCCUPATION	1973 DEMAND	ANNUAL GROWTH OR DECLINE	ANNUAL REPLACE- MENT	1973 UNFILLED POSITIONS	PERCENT OF TOTAL UNFILLED POSITIONS
BLACKSMITH, FORGE., HAMMER	40	-1	ž	0	0.0
BOILERMAKERS	. 19	o	0	0	0.0
MILL WRIGHTS	, 27	0	0	0	0.0
SHEET METAL WORKERS	, 68	1	1	2	0.13
TOOLMAKERS & DIEMAKERS	. ა	0	0	0	0.0
PRINTING TRADES CRAFTS	236	4	4	8	0.54
MECHANICS & REPAIRMEN	1706	39	26	65	4.39
OTHER CRAFTSMEN	1565	19	29	48	3.24
OPERATIVES	6733	103	130	233	15.72
ASSEMBLERS	231	4	5	9	0-61
WELDERS	382	12	4	16.	1.08
SEWERS & STITCHERS, MFG	234	6	9	15	1.01
DRIVERS & DELIVERYMEN	1993	29	28	57	3.85
OTHER OPERATIVES	3893	52	84	136	9.18
SERVICE WORKERS	6065	95	242	337	22.74
PRIVATE HOUSEHOLD	. 1148	-3	64	61	4-12
PROTECTIVE SERVICE WORKERS	. 337	10	9	19	1.28
WAITERS, COOKS, BARTWORS, COUNTER	1740	23	62	85	5.74
OTHER SERVICE WORKERS	2840	65	107	172	11.61
FARMERS & FARM WORKERS	7964	-251	213	38	-2-56
LABORERS EXC. FARM	1899	0	33	33	2.23



- 34 - ECONOMIC REGION 6 - WEST CENTRAL

OCCUPATION	1973 DEMAND	ANNUAL GROWTH OR DECLINE	REPLACE- MENT	1973 UNFILLED POSITIONS	PERCENT OF TOTAL UNFILLED POSITIONS
TOTAL	. 53861	207	1488	1695	100.00
PROFESSIONAL, TECHNICAL, KINDRED	7253	201	156	357	21.06
ENGINEERS TECHNICAL	. 161	7	z	9	0.53
NATURAL SCIENTISTS	63	2	0	2	0.12
MEDICAL, OTHER HEALTH WORKERS	1522	39	13	52	3.07
TEACHERS (ELEM. & SEC.)	2664	59	88	147	8.67
SOCIAL SCIENTISTS	. 26	1	0	1	0.06
OTHER PROF., TECH., & KIND	. 2817	93	53	146	8.61
ACCOUNTANTS & AUDITORS		4	3	7	0.41
ARCHITECTS		0	0	0	0.0
DESIGNERS & DRAFTSMEN	. 63	2	1	3	0.18
LAWYERS & JUDGES		2	3	5	0.29
PERSONNEL & LABOR RELATED WKRS		C	0	0	0.0
OTHER	2472	85	46	131	7.73
MANAGERS, OFFICIALS, PROPRIETORS	4994	36	137	173	10.21
CLERICAL & KINDRED	5172	118	202	320	18.88
STENOS. TYPISTS. SECRETARIES	928	28	44	72	4.25
OFFICE MACHINE OPERATORS	. 49	1	ı	2	0.12
OTHER CLERICAL & KINDRED	4195	89	157	246	14.51
BOOKKEEPERS			40	51	3.01
CASHIERS		11	13	24	1.42
SHIPPING, RECEIVING CLERKS		0	0	0	0.0
TELEPHONE OPERATORS	. 243	3	11	14	0.83
OTHER	. 2584	64	93	157	9-26
SALES WORKERS	. 3717	34	110	144	8.50
CRAFTSMEN	. 5698	92	98	190	11-21
CARPENTERS	. 706	-1	16	15	0.88
ELECTRICIANS	. 184	2	2	4	0.24
PLUMBERS & PIPEFITTERS	. 281	4	4	8	0.47
FOREMEN NEC	498	14	9	23	1.36
MACHINISTS & RELATED	. 82	2	1	3	0.18

- 35 - ECONOMIC REGION 6 - WEST CENTRAL

ANNUAL OCCUPATIONAL DEMAND FOR 1973

OCCUPATION	1973 DEMAND	ANNUAL GROWTH OR DECLINE	ANNUAL REPLACE- MENT	1973 UNFILLED POSITIONS	PERCENT OF TOTAL UNFILLED POSITIONS
BLACKSMITH, FORGE., HAMMER	47	o	1	1	0.06
BOILERMAKERS	6	0	0	0	0.0
MILLWRIGHTS	16	0	0	0	0.0
SHEET METAL WORKERS	52	1	0	l	0-06
TOOLMAKERS & DIEMAKERS	0	0	0	0	0.0
PRINTING TRADES CRAFTS	108	0	2	2	0-12
MECHANICS & REPAIRMEN	2017	49	31	80	4.72
OTHER CRAFTSMEN	1701	21	32	53	3.13
OPERATIVES	5758	98	105	203	11.98
ASSEMBLERS	179	8	4	12	0.71
WELDERS	326	14	3	17	1.00
SEWERS & STITCHERS, MFG	9	0	O	0	0.0
DRIVERS & DELIVERYMEN	1898	19	26	45	2.65
OTHER OPERATIVES	3346	57	72	129	7.61
SERVICE WORKERS	8225	160	339	499	29.44
PRIVATE HOUSEHOLD	2076	9	116	125	7.37
PROTECTIVE SERVICE WORKERS	193	6	5	11	0.65
WAITERS, COOKS, BARTNDRS, COUNTER	2461	43	88	131	7.73
OTHER SERVICE WORKERS	3495	102	130	232	13.69
FARMERS & FARM WORKERS	11709	-532	318	-214	-12.63
LABORERS EXC. FARM	1335	0	23	23	1.36



- 36 ECONOMIC REGION 7 - CENTRAL

OCCUPATION	1973 DEMAND	ANNUAL GREWTH OR DECLINE		1973 UNFILLEC POSITIONS	PERCENT OF TOTAL UNFILLED POSITIONS
TOTAL	95202	1209	2560	3769	100.00
PROFESSIONAL, TECHNICAL, KINDRED	11899	336	245	581	15.42
ENGINEERS TECHNICAL	410	14	5	19	0.50
NATURAL SCIENTISTS	52	2	0	2	0.05
MEDICAL, OTHER HEALTH WORKERS	23,46	62	20	82	2.18
TEACHERS (ELEM. & SEC.)	3434	74	114	188	4.99
SOCIAL SCIENTISTS	0	0	0	0	0.0
OTHER PROF., TECH., & KIND	5657	184	106	290	7.69
ACCOUNTANTS & AUDITORS	280	7	6	13	0.34
ARCHITECTS		1	1	2	0.05
DESIGNERS & DRAFTSMEN		10	5	15	0.40
LAWYERS & JUDGES		2	4	6	0.16
PERSONNEL & LABOR RELATED WKRS		0	0	0	0.0
OTHER	4835	164	90	254	6.74
MANAGERS, OFFICIALS, PROPRIETORS	7544	102	205	307	8.15
CLERICAL & KINDRED	9353	231	364	595	15.79
STENOS, TYPISTS, SECRETARIES	1567	46	75	121	3.21
OFFICE MACHINE OPERATORS	104	3	4	7	0.19
OTHER CLERICAL & KINDRED	7682	182	285	467	12.39
BOOKKEEPERS		34	69	103	2.73
CASHIERS	598	27	23	50	1.33
SHIPPING, RECEIVING CLERKS		1	2	3	0.08
TELEPHONE OPERATORS		4	11	15	0.40
OTHER	4989	116	180	296	7.85
SALES WORKERS	6965	155	204	359	9.53
CRAFTSMEN	11669	221	207	428	11.36
CARPENTERS	1201	0	27	27	0.72
ELECTRICIANS	322	4	5	9	0.24
PLUMBERS & PIPEFITTERS	335	6	5	11	0.29
FOREMEN NEC	1400	38	27	65	1.72
MACHINISTS & RELATED	314	1	6	7	0.19

- 37 ECONOMIC REGION 7 - CENTRAL

ANNUAL OCCUPATIONAL DEMAND FOR 1973

OCCUPATION	1973 DEMAND	ANNUAL GROWTH GR DECLINE	ANNUAL REPLACE- MENT	1973 UNFILLED POSITIONS	PERCENT OF TOTAL UNFILLED POSITIONS
BLACKSMITH, FORGE., HAMMER	. 64	-1	2	1	0.03
BOILERMAKERS	, 9	O	0	0	0.0
MILLWRIGHTS	. 23	0	c	0	0.0
SHEET METAL WORKERS	214	4	3	7	0.19
TOOLMAKERS & DIEMAKERS	61	1	1	2	0.05
PRINTING TRADES CRAFTS	296	5	5	10	0.27
MECHANICS & REPAIRMEN	3909	111	60	171	4.54
OTHER CRAFTSMEN	3521	52	66	118	3.13
OPERATIVES	15361	287	301	588	15.60
ASSEMBLERS	996	15	23	. 38	1.01
WELDERS	1091	32	13	45	1.19
SEWERS & STITCHERS, MFG	386	11	15	26	0.69
DRIVERS & DELIVERYMEN	3709	72	51	123	3.26
OTHER OPERATIVES	9179	157	199	356	9.45
SERVICE WORKERS	15152	368	597	965	25.60
PRIVATE HOUSEHOLD	2649	10	148	158	4.19
PROTECTIVE SERVICE WORKERS	841	15	22	37	0.98
WAITERS, COOKS, BARTNDRS, COUNTER	4448	125	157	282	7.48
OTHER SERVICE WORKERS	7214	218	270	488	12.95
FARMERS & FARM WORKERS	14376	-491	386	-105	-2.79
LABORERS EXC. FARM	2883	٥	51	51	1.35



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ECONOMIC REGION 8 - SOUTHWEST

OCCUPATION	1973 DEMAND	ANNUAL GROWTH OR DECLINE	REPLACE- MENT	1973 UNFILLED POSITIONS	
TOTAL	52048	-208	1435	1227	100.00
PROFESSIONAL, TECHNICAL, KINDRED	6145	98	139	237	19.32
ENGINEERS TECHNICAL	. 231	\$	3	9	0.73
NATURAL SCIENTISTS	. 19	0	0	0	0.0
MEDICAL. OTHER HEALTH WORKERS	. 1165	17	10	27	2.20
TEACHERS (ELEM. & SEC.)	. 2532	27	85	112	9.13
SOCIAL SCIENTISTS	. 4	0	0	0	0.0
OTHER PROF., TECH., & KIND	. 2194	48	41	89	7-25
ACCOUNTANTS & AUDITORS		1	2	3	0.24
ARCHITECTS		0	0	0	0.0
DESIGNERS & DRAFTSMEN		1	1	2	0.16
LAWYERS & JUDGES		0	2	2	0.16
PERSONNEL & LABOR RELATED WKRS		0	0	0	0.0
OTHER			36	82	6.68
MANAGERS, OFFICIALS, PROPRIETORS	. 4517	-3	124	121	9.86
CLERICAL & KINDRED	. 5161	71	203	274	22.33
STENOS, TYPISTS, SECRETARIES	. 968	19	46	65	5.30
OFFICE MACHINE OPERATORS	. 17	0	0	0	0.0
OTHER CLERICAL & KINDRED	- 4176	52	157	209	17.03
BOOKKEEPERS			40	43	3.50
CASHIERS		_			2.12
SHIPPING, RECEIVING CLERKS			- 0	0	0.0
TELEPHONE OPERATORS	-		11	11	0.90
OTHER		_	91	129	10.51
SALES WORKERS	. 3884	14	116	130	10.59
CRAFTSMEN	. 5117	39	88	127	10.35
CARPENTERS	. 545	÷5	12	7	0.57
ELECTRICIANS	. 181	0	2	2	0.16
PLUMBERS & PIPEFITTERS	• 195	1	3	4	0.33
FOREMEN NEC	. 610	9	12	21	1.71
MACHINISTS & RELATED	. 72	0	1	1	0.08

ECONOMIC REGION 8 - SOUTHWEST

OCCUPATION	1973 DEMAND	ANNUAL GROWTH OR DECLINE	ANNUAL REPLACE- MENT	1973 UNFILLED POSITIONS	PERCENT OF TOTAL UNFILLED POSITIONS
BLACKSMITH, FORGE., HAMMER	21	-1	0	-1	-0.08
BOILERMAKERS	. 4	0	0	o	0.0
MILLWRIGHTS	. 10	0	0	0	0.0
SHEET METAL WORKERS	. 33	. 0	0	0	0.0
TOOLMAKERS & DIEMAKERS	. 14	0	0	0	0.0
PRINTING TRADES CRAFTS	112	0	2	2	0.16
MECHANICS & REPAIRMEN	1975	31	31	62	5.05
OTHER CRAFTSMEN	1345	4	25	29	2.36
OPERATIVES	6550	17	124	141	11.49
ASSEMBLERS	243	1	5	6	0.49
WELDERS	183	3	2	5	0.41
SEWERS & STITCHERS, MFG	. 5	0	0	0	0.0
DRIVERS & DELIVERYMEN	2104	5	29	34	2.77
OTHER OPERATIVES	4015	8	88	96	7,.82
SERVICE WORKERS	7186	83	290	373	30.40
PRIVATE HOUSEHOLD	1382	-10	78	68	5.54
PROTECTIVE SERVICE WORKERS	211	5	5	10	0.81
WAITERS, COOKS, BARTNDRS, COUNTER	2088	23	75	98	7.99
OTHER SERVICE WORKERS	3505	65	132	197	16.06
FARMERS & FARM WORKERS	12058	-517	326	-191	-15.57
LABORERS EXC. FARM	1430	-10	25	15	1.22

ECONOMIC REGION 9 - SOUTH CENTRAL

OCCUPATION	1973 DEMAND	ANNUAL GROWTH OR DECLINE	ANNUAL REPLACE- MENT	1973 UNFILLED POSITIONS	PERCENT OF TOTAL UNFILLED POSITION:
TOTAL	103557	909	2811	3720	100.00
PROFESSIONAL, TECHNICAL, KINDRED	13577	319	280	599	16.10
ENGINEERS TECHNICAL	547	23	7	30	0.81
NATURAL SCIENTISTS	52	2	0	2	0.05
MEDICAL, OTHER HEALTH WORKERS	2630	46	23	69	1.85
TEACHERS (ELEM. & SEC.)	3722	45	125	170	4.57
SOCIAL SCIENTISTS		o	0	0	0.0
OTHER PROF., TECH., & KIND	6609	203	125	328	8-82
ACCOUNTANTS & AUDITORS	360	8	7	15	0.40
ARCHITECTS	16	0	0	O	0.0
DESIGNERS & DRAFTSMENLAWYERS & JUDGES	194	6	3	9	0.24
PERSONNEL & LABOR RELATED WKRS		2 5	6	8	0.22
OTHER		182	2	7	0.19
	5046	102	107	289	7.77
MANAGERS, OFFICIALS, PROPRIETORS	8083	66	221	287	7-72
CLERICAL & KINDRED	12184	276	483	759	20.40
STENOS, TYPISTS, SECRETARIES	2788	76	133	209	5.62
OFFICE MACHINE OPERATORS	105	3	4	7	0-19
OTHER CLERICAL & KINDRED	9291	197	346	543	14.60
BOOKKEEPERS		19	73	92	2.47
CASHIERS	969	. 33	38	71	1.91
SHIPPING, RECEIVING CLERKS		3	3	6	
TELEPHONE OPERATORS	_	4	21	25	0.67
UIRER	5845	138	211	349	9-38
SALES WORKERS	8021	104	237	341	9.17
CRAFTSMEN	12403	227	220	447	12.02
CARPENTERS	1200	-2	27	25	0.67
ELECTRICIANS	450	7	7	14	0.38
PLUMBERS & PIPEFITTERS	514	9	9	18	0.48
FOREMEN NEC	1612	49	31	80	2.15
MACHINISTS & RELATED	361	6	7	13	0.35



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ECONOMIC REGION 9 - SOUTH CENTRAL

ANNUAL OCCUPATIONAL DEMAND FOR 1973

OCCUPATION	1973 DEMAND	ANNUAL GROWTH OR DECLINE	ANNUAL REPLACE- MENT	1973 UNFILLED POSITIONS	PERCENT OF TOTAL UNFILLED POSITIONS
BLACKSMITH, FORGE., HAMMER	. 16	0	0	0	0.0
BOILERMAKERS	. 0	0	0	0	0.0
MILLWRIGHTS	. 19	0	0	0	0.0
SHEET METAL WORKERS	. 183	4	2	6	0-16
TOOLMAKERS & DIEMAKERS	. 51	1	0	1	0.03
PRINTING TRADES CRAFTS	433	9	8	17	0.46
MECHANICS & REPAIRMEN	3796	95	59	154	4.14
OTHER CRAFTSMEN	3768	49	70	119	3.20
OPERATIVES	16366	321	333	654	17.58
ASSEMBLERS	1365	41	31	72	1-94
WELDERS	523	20	6	26	0.70
SEWERS & STITCHERS, MFG	465	15	19	34	0.91
DRIVERS & DELIVERYMEN	3489	48	49	97	2.61
OTHER OPERATIVES	10524	197	228	425	11.42
SERVICE WORKERS	14521	240	570	810	21.77
PRIVATE HOUSEHOLD	2049	-13	116	103	2.77
PROTECTIVE SERVICE WORKERS	639	22	17	39	1.05
WAITERS, COOKS, BARTNDRS, COUNTER	4529	75	162	237	6.37
OTHER SERVICE WORKERS	7304	156	275	431	11.59
FARMERS & FARM WORKERS	14990	-638	406	-232	-6.24
LABORERS EXC. FARM	3412	-6	61	55	1.48

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ECONOMIC REGION 10 - SOUTHEAST

OCCUPATION	1973 DEMAND	ANNUAL GROWTH OR DECLINE		1973 UNFILLED POSITIONS	
TOTAL	131651	604	3526	4130	100.00
PROFESSIONAL, TECHNICAL, KINDRED	18438	250	349	59 9	14-50
ENGINEERS TECHNICAL	1194	45	15	60	1.45
NATURAL SCIENTISTS	. 199	6	2	8	0.19
MEDICAL, OTHER HEALTH WORKERS	5758	33	52	85	2.06
TEACHERS (ELEM. & SEC.)	4181	-2	142	140	3.39
SOCIAL SCIENTISTS	73	2	2	4	0.10
OTHER PROF., TECH., & KIND	7033	166	136	302	7.31
ACCOUNTANTS & AUDITORS		11	14	25	0.61
ARCHITECTS	29	. 0	0	0	0.0
DESIGNERS & DRAFTSMEN		9	6	15	0.36
LAWYERS & JUDGES		0	. 7	7	0.17
PERSONNEL & LABOR RELATED WKRS		6	3	9	0.22
OTHER	5591	140	106	246	5.96
MANAGERS, OFFICIALS, PROPRIETORS	9510	30	262	292	7.07
CLERICAL & KINDRED	17275	280	683	963	23.32
STENOS, TYPISTS, SECRETARIES	3925	77	189	266	6.44
OFFICE MACHINE OPERATORS	246	7	9	16	0.39
OTHER CLERICAL & KINDRED	13104	196	485	681	16.49
BOOKKEEPERS		8	89	97	2.35
CASHIERS	1144	32	45	77	1.86
SHIPPING, RECEIVING CLERKS		3	6	9	0.22
TELEPHONE OPERATORS		5	24	29	0.70
OTHER	8846	148	321	469	11.36
SALES WORKERS	9314	57	277	334	8.09
CRAFTSMEN	16784	244	302	546	13.22
CARPENTERS	1845	-6	42	36	0.87
ELECTRICIANS	551	7	8	15	0.36
PLUMBERS & PIPEFITTERS	710	12	12	24	0.58
FOREMEN NEC	2140	53	42	95	2.30
MACHINISTS & RELATED	684	11	13	24	0.58

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ECONOMIC REGION 10 - SOUTHEAST ANNUAL OCCUPATIONAL DEMAND FOR 1973

OCCUPATION	1973 DEMAND	ANNUAL GROWTH OR DECLINE		1973 UNFILLED POSITIONS	PERCENT OF TOTAL UNFILLED POSITIONS
BLACKSMITH, FORGE., HAMMER	. 27	0	0	0	0.0
BOILERMAKERS	. 9	0	0	0	0.0
MILLWRIGHTS	. 57	1	1	2	0.05
SHEET METAL WORKERS	. 300	7	4	11	0.27
TOOLMAKERS & DIEMAKERS	254	7	4	• 11	0.27
PRINTING TRADES CRAFTS	. 467	0	9	9	0.22
MECHANICS & REPAIRMEN	5060	97	79	176	4.26
OTHER CRAFTSMEN	4680	55	88	143	3.46
OPERATIVES	. 22825	312	456	768	18.60
ASSEMBLERS	. 1853	55	43	98	2.37
WELDERS	994	36	11	47	1.14
SEWERS & STITCHERS, MFG	. 237	3	9	12	0.29
DRIVERS & DELIVERYMEN	. 4790	61	67	128	3.10
OTHER OPERATIVES	. 14951	157	326	483	11.69
SERVICE WORKERS	. 17268	104	689	793	19.20
PRIVATE HOUSEHOLD	. 2909	-59	167	108	2.62
PROTECTIVE SERVICE WORKERS	. 1319	38	35	73	1.77
WAITERS, COOKS, BARTNDRS, COUNTER	. 4950	42	178	220	5.33
OTHER SERVICE WORKERS	. 8090	83	309	392	9-49
FARMERS & FARM WORKERS	. 16040	-648	433	-215	-5.21
LABORERS EXC. FARM	. 4197	-25	75	50	1.21



ECONOMIC REGION 11 - METROPOLITAN ANNUAL OCCUPATIONAL DEMAND FOR 1973

	1973 DEMAND	ANNUAL GROWTH OR		1973 UNFILLED POSITIONS	
OCCUPATION		DECLINE			POSITION:
TOTAL	868814	18689	23559	42248	100.00
PROFESSIONAL, TECHNICAL, KINDRED	153852	4866	2851	7717	18.27
ENGINEERS TECHNICAL	22045	814	283	1097	2.60
NATURAL SCIENTISTS	3516	122	45	167	0.40
MEDICAL, OTHER HEALTH WORKERS	26237	815	231	1046	2.48
TEACHERS (ELEM. & SEC.)	18986	221	640	861	2.04
SOCIAL SCIENTISTS	1476	48	45	93	0.22
OTHER PROF., TECH., & KIND	81592	2846	1607	4453	10,54
ACCOUNTANTS & AUDITORS		350	271	621	1.47
ARCHITECTS		18	18	36	0.09
DESIGNERS & DRAFTSMEN			136	359	0.85
LAWYERS & JUDGES			100	160	0.38
PERSONNEL & LABOR RELATED WKRS		84	51	135	0.32
			1031	3142	7.44
OTHER	, 23062	2111	1031	2142	
MANAGERS, OFFICIALS, PROPRIETORS	71988	1139	1958	3097	7.33
CLERICAL & KINDRED	180818	4395	7185	11580	27.41
STENOS, TYPISTS, SECRETARIES	47775	1357	2290	3647	8.63
OFFICE MACHINE OPERATORS	10396	394	402	796	1.88
OTHER CLERICAL & KINDRED	122647	2644	4493	7137	16.89
BOOKKEEPERS			559	803	1.90
CASHIERS			397	782	1.85
SHIPPING, RECEIVING CLERKS		40	75	115	0.27
TELEPHONE OPERATORS	4545	· -	215	296	0.70
OTHER			3247	5141	12.17
SALES WORKERS			2131	3373	7.98
CRAFTSMEN	. 120187	2292	2177	4469	10.58
CARPENTERS	7032	7	161	168	0.40
ELECTRICIANS	. 3677	55	57	112	0.27
PLUMBERS & PIPEFITTERS	. 4122	84	72	156	0.37
FOREMEN NEC	. 17892	498	350	848	2.01
CMACHINISTS & RELATED	9896	73	198	271	0.64

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ECONOMIC REGION 11 - METROPOLITAN ANNUAL OCCUPATIONAL DEMAND FOR 1973

OCCUPATION	1973 DEMAND	ANNUAL GROWTH DR DECLINE	ANNUAL REPLACE- MENT	1973 UNFILLED POSITIONS	PERCENT OF TOTAL UNFILLED POSITIONS
BLACKSMITH, FORGE., HANNER	. 225	-3	7	- 4	0.01
BOILERMAKERS	. 154	0	3	3	0.01
MILLWRIGHTS	. 742	18	13	31	0.07
SHEET METAL WORKERS	. 2588	47	38	85	0.20
TOOLHAKERS & DIEMAKERS	. 3512	81	61	142	0.34
PRINTING TRADES CRAFTS	. 5554	49	107	156	0.37
MECHANICS & REPAIRMEN	. 33071	883	515	1398	3.31
OTHER CRAFTSMEN	. 31722	500	595	1095	2.59
OPERATIVES	. 136398	2609	2760	5369	12.71
ASSEMBLERS	. 17833	390	419	809	1.91
WELDERS	. 6346	215	76	291	0.69
SEWERS & STITCHERS, MFG	. 1555	21	64	85	0.20
DRIVERS & DELIVERYMEN	26135	504	366	870	2.06
OTHER OPERATIVES	84529	1479	1835	3314	7.84
SERVICE WORKERS	101695	2516	3877	6393	15.13
PRIVATE HOUSEHOLD	. 10151	-110	578	468	1.11
PROTECTIVE SERVICE WORKERS	6086	155	163	318	0.75
WAITERS, COOKS, BARTNDRS, COUNTER	. 31104	834	1102	1936	4.58
OTHER SERVICE WORKERS	. 54354	1637	2034	3671	8.69
FARMERS & FARM WORKERS	5838	-315	159	-156	-0.37
LABORERS EXC. FARM	25738	-55	461	406	0.96



APPENDIX

